Project Tracking No.: P-038-FY03-ITD

Return on Investment Program Funding Application (FY 2003 Request)

This is an electronic template. Please enter your responses on this document. Only electronic submittals of this template will be accepted. Proposals submitted after the designated due date may not receive funding consideration.
FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform a final project outcome audit, after implementation, for all Pooled Technology funded projects.

SECTION I: PROPOSAL

Date: 7/15/01

Agency Name: Information Technology Department (ITD)

Project Name: Identity Security

Expenditure Name:

Agency Manager: Ken Adrian

Agency Manager Phone Number / E-mail: (515) 725-0367 / Ken.Adrian@its.state.ia.us

Executive Sponsor (Agency Director or Designee): Richard J. Varn

Request For ROI Application Waiver:

Agencies are required to complete this funding application when requesting funds for any project, any IT expenditure costing over $100,000, or any non-routine IT expenditure. If you feel there is compelling reason to waive this requirement, please provide (in the box provided below) a brief description of the project or expenditure, the budget amount, and a rationale for the waiver request. Until a decision is made regarding your waiver request, it is not necessary to complete any other portion of this application. The ITD Enterprise Quality Assurance Office will convey waiver request decisions within five working days of receipt.

Explanation:

A. Project or Expenditure Rationale

Is this project or expenditure necessary for compliance with a Federal standard, initiative, or statute? ☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Is this project or expenditure required by State statute? ☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

Does this project or expenditure meet a health, safety or security requirement?
☒ **YES** (If "YES," explain) ☐ **NO**

Explanation: This project will secure the identity of citizens and organizations within the State of Iowa. This will enable identity security and enable secure e-transactions with State government.

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☒ **YES** (If "YES," explain) ☐ **NO**

Explanation: Identity Security will be the enterprise technology standard. Projects having a component that needs to identify a person or organization will need to comply with the standard produced by this project.

Is this project or expenditure consistent with meeting the goals and objectives of the State's strategic plans?
☒ **YES** (If "YES," explain) ☐ **NO**

Explanation: This is an enabling technology, a foundation to provide secure e-government transactions between citizens and state organizations. This project fulfills the ITD mission to establish a central point for technology infrastructure, standards, interoperability, and, once implemented, will be an integral component in enterprise planning. In order to achieve seamless services to citizens, a secure identity is needed as a foundation for a single, electronic gateway.

Is this a "research and development" project or expenditure? ☐ **YES** (If "YES," explain) ☒ **NO**

Explanation:

B. Project or Expenditure Summary

1. Provide a pre-project or pre-expenditure (before implementation) and a post-project or post-expenditure (after implementation) description of the impacted system or process. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response:
Pre-project:
The pre-project situation was researched in a study performed by ITD in the spring of 2001. The results are presented in the Identity Security Findings white paper for that study. To recap the study:

-- Diverse structures of information exist separately within various agencies, with a high probability of duplicated data in the various locations being out of date.
-- There is no one state-wide definition of what identification is, nor is there a consistent method of identifying the same person.
-- The data storage and construction was not necessarily developed from a customer centric perspective.
-- Attempts to conduct cross-agency studies are hindered by the differences of identity of person or organization throughout the various agencies of the state.
-- Agencies spend resources to design, build, enter, correct, and maintain identity information in each application. This produces problems associated with duplicate data stored in various locations, such as determining which data is correct and up-to-date when differences are found.
-- Where appropriate, agencies are starting to initiate "integration" projects aimed at integrating their information about people or organizations.
-- Currently, if an agency has a web application enabled, each system has its own security authentication, with no standard enterprise security or authentication in place.
-- Identity theft is becoming a pervasive problem causing affected citizens and businesses to spend time and money to resolve the crime. Citizens are insisting that government address this problem.

Post-project:
Post-project the impact would be on Information Technology (IT) in the areas of new development and in re-engineering existing applications. When developing a new application or when re-engineering an existing application, the development process would utilize the standardized identity component. Since secure identity is a foundation for other enterprise projects, as other ITD components are implemented by agencies, the identity component would be activated in conjunction with the enterprise components. Some examples are: PKI, Digital Signature, Data Warehouse, licensing.

A pilot will be introduced to create the concept of a master address list for Iowans. The address list will allow agencies to share and verify address information. The address list will also allow citizens one place to change their address and view the information that the State currently collects on them.

2. Summarize the extent to which the project or expenditure improves customer service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.

Response: Upon completion of the Identity Security project, ITD hopes to accomplish the following:
- Standardize the methods of authenticating identity across the state
- Avoid the high costs and inefficiencies of having each application within each agency create their own method of utilizing identity.
- Facilitate easier implementation of Data Warehouse, reducing transformation processes and costs by having an enterprise identity standard.
- More efficiently aggregate information, including dissemination to the public.
- Avoid duplication to the citizen by sharing authentication across the state – i.e. use of multiple UserIDs, passwords, and tokens - resulting in reduced hassle factor for the citizen.
- Enable a State of Iowa portal emphasizing a citizen centric view.
- Enable encrypted, secure data transfer using digital signatures confidently attached to the correct identity.
- A cooperative system where agencies can trust the due diligence of another agency's authentication and identification procedures. This would enable the state to reduce costs in identifying people and speed up services to citizens.
- The state could take a proactive stance on assisting citizens victimized by identity theft.
- Complete the master address list pilot.

3. Identify the main project or expenditure stakeholders and summarize the extent to which each, especially citizens, is impacted. In particular, note if the project or expenditure helps reconnect Iowans to State government.

Response: A program of this magnitude has many stakeholders; it is not unreasonable to identify all State citizens, agencies, and business partners as stakeholders that will be impacted by the project.

Citizens and organizations:

- Ability for self-service interactions with the State of Iowa
- Ability to manage their own records
- Faster, economical, convenient, secure service with the State of Iowa
- Identity theft mitigation

Agencies:

– Personal identification standards
– Assurance that the State is dealing with a correctly identified entity
– Economic benefit in cost savings
– Foundation for enterprise applications
– Secure information sharing

State of Iowa enterprise:

- Citizen's ability to conduct business with the State in a secure manner over the internet
- Costly to continue to build separate, isolated solutions
- Economy of scale for digital signature implementations
- Reduces costly transformation for Data Warehouse initiatives

SECTION II: PROJECT ADMINISTRATION

A. Agency Information

1. Project Executive Sponsor Responsibilities: The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

Response: No response required.

2. Organization Skills:
   a. List the project management skills necessary for successful project implementation
   b. List the project management skills available within the agency
   c. List the source(s) of project management skills lacking within the agency
   d. Summarize relevant agency project management experience and results

Response:
a. general project management skills geared toward IT projects
b. ITD has ITS5 level project managers and enterprise project managers in Policy and Planning
c. ITD will outsource any project management activities identified to be lacking at inception of the project plan.
d. The ITD has coordinated to this point a study of identity to gather user requirements. On the implementation side, ITD has experience creating large scale database implementations such as the data warehouse and mainframe applications.

B. Project Information

1. History:
   a. Is this project the first part of a future, larger project? If so, please explain.
   b. Is this project a continuation of a previously begun project? If so, please explain project history, current status, and results.

Response:
a. This project is part of the 100% E by 2003 project. It is a foundation for enabling secure electronic transactions with State government. This project will potentially impact all application development projects in State government.
b. This project is the continuation of an identity assessment to identify how the State views identity and is ancillary to the data warehouse and PKI projects

2. Expectations: Describe the primary purpose or reason for the project.

Response: To ensure that a person is who they say they are when conducting business with State government organizations. To institute measures to protect the identity of citizens. To allow citizens the option of self correcting information in the State system.

3. Measures: Describe the criteria that will be used to determine if the project is successful.

Response: There are a variety of criteria.
-- To the citizen, success would be measured if the citizen is able to secure their identity, then have the ability to authenticate themselves once to State government, have access to appropriate information and services, and procedures in place to correct erroneous information.
-- To the agencies, success would be measured in terms of a reusable identity security component they could use when creating or re-engineering applications. This would produce development cost savings to development expenditures. The agencies would also reduce their needs for ongoing maintenance and support, as it would be handled centrally.
-- To the State of Iowa enterprise, success would be measured in terms of reduced transformation costs into warehouse operations. Also, the state would be able to more easily evaluate and propose programs to measure their effectiveness to citizens.

4. Environment: List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, etc.).

Response: State government enteprise, all agencies, citizens, associations, and businesses could utilize the identity security component.

5. Risk: Describe the project risks which may be internal or external to State government, i.e. implementing versus not implementing project, changing technology, potential cost overruns, changing citizen demand or need, etc.

Response: Overcoming emotional and political fears and roadblocks will be more challenging than the technology involved to produce a solution. An ongoing dialogue will be needed to initiate legislative action, administrative rules action, and possibly federal legislation.

If this is not implemented, a person's identity continues to be at risk for theft and that risk is growing as identity thieves become more automated and sophisticated. The fragile paper-trail foundation of identity in place today does not adequately protect the citizen.

If this is not implemented, each application developed will produce its own style of identifying users of the system, producing an additional hassle factor to the citizen who would need to remember a variety of passwords or identification tokens to access various services in the state. If it is implemented, a citizen would be able to authenticate him or herself to the state once, and then be able to access what information and services they are entitled to. This provides confidence in the security and appropriateness of the information and services received from the State.

Technology has changed to the point that what is needed to implement this is now ubiquitous and cost effective.

6. Security / Data Integrity / Data Accuracy / Information Privacy
   a. List the security requirements of the project
   b. Describe how the security requirements will be integrated into the project and tested
   c. Describe what measures will be taken to insure data integrity, data accuracy and information privacy.

Response:

a. There are several levels of concerns to address with privacy and security and confidentiality. -- Iowa was one of the first states to enact a privacy policy for it's web sites. The privacy policy must be adhered to and communicated indicating what the state can, will, and won't do with the information.
-- Securing the information must conform to the highest possible standards and features available.

b. The Security Office of the ITD will be on the oversight committee for the project and their role will be to address new standards being wrought by this process, as well as, ensuring the project adheres to existing standards,

c. The standard measures that ITD noew employs will be applied to the project.

7. Project Schedule
   Describe general time lines, resources, tasks, checkpoints, deliverables, responsible parties, etc.

Response: This project's timeline or schedule is TBD. As a foundation for many other initiatives, it must be started and completed soon. Several of the first tasks are prepared and ready to implement once approved. These include: (with rough goals and ITD ownership)

1st Quarter
-- Establishing an Identity Theft Advocate position to assist citizens whose identity have been stolen and to oversee legal privacy issues.
-- Establishing a forum of cross agency representatives to record requirements, constraints, security issues, ramifications, and solutions for the project.

2nd Quarter
-- Establish a project plan for an implementation of a master address list.
-- ITD would manage and maintain the project

3rd Quarter
Integrate PKI

4th Quarter
-- Roll out pilot project
-- Assess pilot

SECTION III: TECHNOLOGY (In written detail, describe the following)

A. Current Technology Environment

1. Software (Client Side / Server Side / Midrange / Mainframe):
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external

Response: TBD

2. Hardware (Client Side / Server Side / Mid-range / Mainframe):
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external

Response: TBD

B. Proposed Technology Environment

1. Software (Client Side / Server side / Mid-range / Mainframe)
   a. Application software
   b. Operating system software
   c. Major interfaces to other systems, both internal and external
   d. General parameters if specific parameters are unknown or to be determined

Response: It is anticipated this project would use existing resources located within ITD, with additional utilization coinciding with the PKI project.

2. Hardware (Client Side / Server Side / Mid-range / Mainframe)
   a. Platform, operating system
   b. Storage and physical environment
   c. Connectivity and Bandwidth
   d. Logical and physical connectivity
   e. Major interfaces to other systems, both internal and external
   f. General parameters if specific parameters are unknown or to be determined

Response: It is anticipated this project would conduct a prototype utilizing existing data warehouse architecture, needing 20 gig storage space.

C. Data Elements

If the project creates a new database, provide a description of the data elements.

Response: Additional data elements will be designed to create a standard for the enterprise consisting of data required to uniquely identify a person or organization. It is a significant part of this project to analyze and design these elements and promote the resulting standards.

SECTION IV: Financial Analysis

A. Budget: Enter figures and calculate (see formula below) Total Annual Prorated Cost (State Share).

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right)\times \%\ State\ Share\right]+\left(Annual\ Ongoing\ Cost\times \%\ State\ Share\right)=Annual\ \text{Pr}orated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$60000	4	100%	$60000	%	$75000
Software	$400000	4	100%	$	%	$100000
Hardware	$250000	3	100%	$	%	$83333
Training	$	4	%	$	%	$
Facilities	$	1	%	$	%	$
Professional Services	$208000	4	100%	$	%	$52000
ITD Services	$	4	%	$25000	%	$25000
Supplies, Maint, etc.	$	1	%	$	%	$
Other (Specify)	$	1	%	$	%	$
Totals	$918000	-------	-------	$85000	------	$335333

Transfer this amount to the ROI Financial Worksheet, item "D" on page 14.

B. Funding: Enter data or provide response as requested

1. This is (pick one):
   - ☒ A Pooled Technology Fund or Reengineering Fund Request
   - ☐ An Agency IT Expenditure or Budget Request (General Fund, Road Funds, etc)
   - ☐ Other – Specify:

2. On a fiscal year basis, enter the estimated cost by funding source?

	FY03		FY04		FY05	
	Cost ($)	% Total Cost	Cost ($)	% Total Cost	Cost ($)	% Total Cost
State General Fund	$	%	$60000	100%	$	%
Pooled Tech. Fund	$918000	100%	$25000	100%	$	%
Federal Funds	$	%	$	%	$	%
Local Gov. Funds	$	%	$	%	$	%
Grant or Private Funds	$	%	$	%	$	%
Other Funds (Specify)	$	%	$	%	$	%
Total Project Cost	$918000	100%	$85000	100%	$	100%

If applicable, summarize prior fiscal year funding experience for the project / expenditure.

Response: FY -01 - Prima Facie Identity Study $20,000

1. On a fiscal year basis, how much of the total ($ amount and %) project / expenditure cost would be absorbed by your agency from normal operating budgets (all funding sources)?

Response: 0

2. Identify, list, and quantify all new annual ongoing (maintenance, staffing, etc.) related costs (State $s) that will be incurred after implementation or expenditure.

Response: $60,000 - staff in security
$25,000 - Maintenance on server (10% of cost)

C. ROI Financial Worksheet: Respond to the following and transfer data to the ROI Financial Worksheet (see IVC11) as necessary:

1. Annual Pre-Project Cost – Quantify all actual state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation. This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation.

Response: The following figures are based on 193 computer systems across state government. To maintain the identity information within those systems requires 3.7% of the annual maintenance costs. When developing new systems, between 5 and 10% of development costs are consumed to develop the identity component of the system.

2. Annual Post-Project Cost – Quantify all estimated State government direct and indirect costs associated with activity, system or process after project implementation. This section should be completed only if State government operations costs are expected to be reduced as a result of project implementation.

Response: When implemented, the identity system component will be used to provide a consistent identity interface to all new development. This reduces development costs for new applications to 3.9% of the system development costs. It reduces the ongoing maintenance of the identity information to 1.4% of system maintenance costs.

3. State Government Benefit -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost." This section should be completed only if State government operations costs are expected to be reduced as a result of project implementation.

Response: For example, assume $100,000,000 in annual maintenance costs for the computer systems across the state. The annual maintenance savings would be $2,300,000 by the utilization of a state-wide identity component. Assuming an annual development budget of $10,000,000, the annual cost savings would be between $110,000 and $610,000.

4. Citizen Benefit – Quantify the estimated annual value of the project to Iowa citizens**.** This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time savings and $.325 per mile for travel cost savings.

Response: According to the California Public Interest Research Group, it takes an average of 2 years and $18,000 for identity theft victims to clean up their stolen records and to remove fraudulent charges from their credit reports. This is the cost in dollars and time only for the victim of the crime. The societal costs, including the costs to investigate and prosecute the crime and the financial institutions writing off the stolen money are paid by all citizens and organizations.

5. Opportunity Value/Risk or Loss Avoidance Benefit – Quantify the estimated annual non-operations benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response:

6. Total Annual Project Benefit -- Add the values of all annual benefit categories.

Response:

7. Total Annual Prorated Cost – It is necessary to estimate and assign a useful life figure to each cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all new annual ongoing costs that are project related. Completing Section IV-A, Project Budget of the evaluation document will provide all the necessary information for this item.

Response:

8. Benefit / Cost Ratio – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost." If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

Response:

9. ROI -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the requested State IT project funds.

Response:

10. Benefits Not Readily Quantifiable -- List the project benefits which are not readily quantifiable (i.e. IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.). Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Readily Quantifiable" box in the applicable row.

Response:
5. One place of audit for use/misuse of identity information
6. Ability to create custom identity components for enterprise development platforms (Jetform, WELS, JAVA)
7. Ability for data to easily flow from inception to long term storage with minimum transformations
8. Standards based application development with an identity component
9. Ability for agencies to share identity data, where applicable, based upon enterprise standards
10. Increased customer self service activity

11. ROI Financial Worksheet	
Annual Pre-Project Cost - How You Perform The Function(s) Now	
FTE Cost (salary plus benefits):	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
A. Total Annual Pre-Project Cost:	$
Annual Post-Project Cost – How You Propose to Perform the Function(s)	
FTE Cost:	$
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$
B. Total Annual Post-Project Cost:	$
State Government Benefit (= A-B):	$
Annual Benefit Summary	
State Government Benefit:	$
Citizen Benefit:	$
Opportunity Value or Risk/Loss Avoidance Benefit:	$
C. Total Annual Project Benefit:	$
D. Annual Prorated Cost (SECTION IV-A):	$295333
Benefit / Cost Ratio: (C / D) =	
Return On Investment (ROI): (C – D) / Requested Project Funds) x 100 =	**%**
☒ **Benefits Not Readily Quantifiable**	

Section V: ITC Project Evaluation Criteria

Criteria and Location in Project Evaluation Document		Points
1.	Is the project a statutory requirement; legal requirement; federal or state mandate; health, safety or security requirement or issue; and/or required for compliance with the enterprise technology standards? **Location: Section I-A**	**15**
2.	Will the project improve customer service? **Location: Section I-B.2**	**15**
3.	Does the project have a direct impact on citizens? To what extent does the project help reconnect state government with Iowans? **Location: Section I-B.3**	**10**
4.	Does the project provide a sufficient tangible and/or intangible return on investment? Will it generate savings or income? **Location: Section IV-C**	**10**
5.	Does the project make use of information technology and its practical application in reengineering traditional government processes consistent with the goals and objectives of the state's strategic plans? **Location: Section I-B.1**	**10**
6.	Risk: What are the risks associated with the project? Such risks may include those internal and external to state government, the risk of doing a project, the risk of not doing a project, and the risks associated with changing technologies, potential cost overruns, and changing citizen demands and needs. **Location: Section II-B.5**	**10**
7.	Is this funding required to continue a project that was begun prior to the year funding is being requested for and does it have proven past performance? Is the funding part of a multi-year strategy? **Location: Section II-B1, IVB2**	**10**
8.	Will the project be for only one agency, multiple agencies, or the state government enterprise? **Location: Section I-B3, IIB4**	**10**
9.	Has the applicant maximized their own and other resources in the project? Is alternative funding unavailable for this project? (If no other funding available, project will not be completed without Pooled Technology funding) **Location: Section IV-B.2, IV-B.3**	**5**
10.	What is the credibility of the requester based on past performance on other projects? **Location: Section II-A.2.d**	**5**
	Total	**100**